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EAGLE FORUM EDUCATION & LEGAL DEFENSE FUND

United States Patent & Trademark Office
600 Dulany Street
P.O. Box 1450
Alexandria, VA 22313

**RE: Request for Information Regarding Patent Eligibility Jurisprudence Study,
Docket No. PTO-P-2021-0032**

To whom it may concern:

Eagle Forum Education & Legal Defense Fund, a nonprofit organization founded by Phyllis Schlafly¹ in 1981, is pleased to comment on the U.S. Patent & Trademark Office's "Request for Information Regarding Patent Eligibility Jurisprudence Study" (Docket No. PTO-P-2021-0032). We applaud PTO's timely response to the bipartisan request for such a study that U.S. Senators Thom Tillis, Chris Coons, Mazie Hirono, and Tom Cotton made, and we appreciate these senators' leadership on this critically important matter.

We state at the outset: Predictable, reliable patent-eligible subject matter and ensuring patents' certainty and reliability in matters related to 35 U.S. Code Sec. 101 — from patent examination to any subsequent reviews by an Article III court, the U.S. International Trade Commission, or a PTO administrative proceeding years after the invention was made — are tantamount to whether meaningful exclusive patent rights exist. Today, they do not.

Patent-eligibility jurisprudence has reached what former Federal Circuit Chief Judge Paul Michel and intellectual property attorney Matthew Dowd have termed "a quagmire in which courts, innovators, and investors alike can make very little sense of whether a patented invention qualifies as patent-eligible subject matter."²

In short, the combination of *Bilski v. Kappos* in 2010, *Mayo Collaborative Services v. Prometheus Laboratories* in 2012, *Association for Molecular Pathology v. Myriad Genetics* in 2013, and *Alice Corp. v. CLS Bank* in 2014, individually and through the "Mayo-Alice Framework," have judicially created exceptions to broad statutory language. Worse, courts have reached contradictory decisions applying complicated "tests" without definitions for key terms and untethered from the statute. The trouble began in earnest when in *Bilski* the

¹ Phyllis Schlafly was an outspoken advocate of the rights of inventors, emphasizing the importance of their traditional rights to our national prosperity and security. She wrote often about this topic, including as a Commissioner of the Commission on the Bicentennial of the United States Constitution. A compilation of her writings on this subject is *Phyllis Schlafly Speaks, Vol. 4, Patents & Inventions*. Skellig America, 2018 (Ed Martin, Editor).

² Paul R. Michel and Matthew J. Dowd, "[From a Strong Property Right to a Fickle Government Franchise: The Transformation of the U.S. Patent System in 15 Years.](#)" *Drake Law Review*, Vol. 69 (June 2021), p. 24.

Supreme Court shunned the practicable “machine-or-transformation test,” which had contributed to greater predictability and stability in 101 jurisprudence.

Further, courts and PTAB have conflated substantive patent criteria with patent eligibility. Former PTO Director David Kappos observes, “Patent invalidity rates under Section 101 abstractness remain alarmingly high. Congress needs to remedy this unworkable situation by returning to legislation that redefines patent eligibility standards to overrule the Supreme Court’s decisions that have warped the contours of Section 101 beyond recognition.”³

A positive development in 101 has been PTO’s 2019 patent eligibility guidance. Our comments on the 2019 revisions commended “PTO for deriving order and practical applicability out of the chaos of judicial rulings on patentable subject matter.”⁴ Unfortunately, even the Federal Circuit has declined to be bound by PTO’s guidance. That leaves federal courts with, as Chief Judge of the Federal Circuit Kimberly Moore put it, “validity goulash [that] is troubling and inconsistent with the patent statute and precedent.”⁵

Our following comments answer two questions from Section II.

10. Please identify how the current state of patent eligibility jurisprudence in the United States impacts the global strength of U.S. intellectual property.

Many indicators show the adverse effects patent eligibility jurisprudence is having on the global strength of U.S. IP. We note two prominent measures that are widely recognized as credible. We also recapitulate a relevant observation we made two years ago.

First, the U.S. Chamber of Commerce Global Innovation Policy Center rates the U.S. IP regime vis-à-vis other nations in its latest annual ranking. While the United States places first overall in IP system strength, this is due less to the state of our patent system than to U.S. trademarks and copyrights. With regard to patents, the United States lags Singapore, which holds the top spot, tied with Japan, South Korea, and Switzerland for second place. Next comes an 8-way tie for third place. Thus, the U.S. hold on its tie for second is tenuous.

Continued judicial turmoil of patent eligibility, withdrawal or weakening of PTO eligibility guidance, easing PTAB access, lowering the already low bar for PTAB’s patent invalidations, withdrawing the 2019 PTO-Justice Department-NIST Joint Policy Statement on standard-essential patent access to the full array of relief including injunctions, or pressing forward with the administration’s support for the proposed waiver of IP protections under the TRIPS agreement — any one or combination of these patent-weakening moves is likely to bring a U.S. slide in the GIPC rankings.

GIPC’s 2021 rankings cite the status quo of patent eligibility jurisprudence as a key factor in America’s falling short of the top spot globally. “As noted over the course of the Index, since the Supreme Court decisions in the *Bilski*, *Myriad*, *Mayo*, and *Alice* cases, there has been a

³ David Kappos, “Section 101 Is Not Fixing Itself: A Look At Patent System Stats,” *Law 360* (May 7, 2020).

⁴ Eagle Forum ELDF comments of March 6, 2019, regarding “2019 Revised Patent Subject Matter Eligibility Guidance, Docket No. PTO-P-2018-0053,” p. 2.

⁵ Judge Kimberly Moore, dissenting opinion, *American Axle & Manufacturing v. Neapco Holdings*, p. 14.

the Supreme Court decisions in the *Bilski*, *Myriad*, *Mayo*, and *Alice* cases, there has been a high and sustained level of uncertainty as to what constitutes patentable subject matter in the United States. . . . The net result is that rights-holders are left without a clear sense of how decisions on patent eligibility will be made or, when granted patents are subsequently challenged or reviewed either through the courts or through the inter partes proceedings within the USPTO, which patent claims will be upheld. . . . Uncertainty over what constitutes patentable subject matter has crept into all facets of the patent system, from initial application and examination to standards of review and invalidity proceedings, whether administratively through the PTAB or through the judiciary.”⁶ Notably, the GIPC ranking credits the 2019 PTO 101 guidance with improving the picture somewhat at the examination stage.

By comparison, GIPC ranks China’s IP regime 24th out of 53. The report notes, “China has over the past two years essentially revamped its national IP environment by amending and updating most major IP laws and regulations.”⁷

Second, the Bloomberg Innovation Index (BII) ranks the United States 11th in its 2021 index. This is two spots lower than the U.S. ranking of 2020. South Korea retook first place in 2021, leading the index for the seventh year of nine. “[South] Korea’s return to the top spot is mainly due to an increase in patent activity, where it ranks top, alongside a strong performance in R&D and manufacturing.”⁸

The Bloomberg Innovation Index includes patents and IP, but weighs a broader array of factors related to innovation than IP alone. The United States led the BII in its inaugural year of 2013, and Germany placed first in 2020. This year, China slid one spot to 16th; however, China has steadily risen from 30th over the Bloomberg ratings’ existence while the United States has slouched from first to out of the top 10.

Third, to reiterate from our 2019 comment letter: “The stakes of achieving clear, consistent, predictable determinations of what is and is not patentable are extremely high. The list of competition areas with China, other East Asian countries, and European Union nations is long — and growing. It includes nanotechnology, biotechnology, drug development and delivery mechanisms, 5G telecommunication, genetic medicine and diagnostics, solar power, quantum computing, and the like. These patent-heavy arts and sciences involve subject matter that U.S. courts are capriciously rendering unpatentable, while our foreign competitors continue to construe inventions in these areas as patentable. The United States is in a technology race, if not a war. Without a strong patent system and first-to-market process, the United States will lose that race — with profound implications for our standard of living, industrial competitiveness, and national security.”⁹

⁶ Global Innovation Policy Center, *International IP Index: Recovery Through Ingenuity*, 2021 Ninth Edition, pp. 310-311.

⁷ *Ibid.*, p. 107.

⁸ Michelle Jamrisko, Wei Lu, and Alexandre Tanzi, “South Korea Leads World in Innovation as U.S. Exits Top Ten,” *Bloomberg* (Feb. 2, 2021).

⁹ *Op.cit.*, p. 2.

Thus, the state of U.S. patent strength globally remains significantly weakened, directly due to patent eligibility jurisprudence as it now stands. This situation harms our IP-based advantage relative to our global competitors, while it benefits aggressive nations such as China.

12. Please identify how the current state of subject matter eligibility jurisprudence in the United States impacts the global strength of U.S. intellectual property and the U.S. economy in any of the following areas: a. Quantum computing; b. artificial intelligence; c. precision medicine; d. diagnostic methods; e. pharmaceutical treatments; and f. other computer-related inventions (e.g., software, business methods, computer security, databases and data structures, computer networking, and graphical user interfaces). In responding to this question, please provide concrete examples and supporting facts when possible.

The emerging strategic technologies listed in question 12 share long-horizon, greatly uncertain research and development pathways. Innovative companies make R&D investment decisions in these and other foundational inventions many years before innovators have more than a hint of potential technological, much less commercial, success. Reliable patents, along with the exclusivity and enforceability patents are supposed to guarantee, constitute a central basis for sinking significant R&D costs long in advance of any commercial return on that investment. The post-*Bilski*, *Alice-Mayo* “validity goulash” plaguing the United States — disrupting dependability that patents will stand under after-the-fact review years after patent examination and issuance — poses a serious threat to the ability of U.S. innovators in strategically vital arts.

With regard to artificial intelligence, the National Security Commission for Artificial Intelligence warns, “China stands a reasonable chance of overtaking the United States as the leading center of AI innovation in the coming decade.”¹⁰

Moreover, the NSCAI report specifies the crisis in U.S. patent eligibility jurisprudence as a critical part of the competitiveness and innovation leadership challenges facing the United States. “[L]egal uncertainties created by *current U.S. patent eligibility and patentability doctrine*, the lack of an effective response to China’s domestic and geopolitical strategies centered on its IP institutions, and the lack of effective data protection policies . . . [mean] *the U.S. could lose its prime position in IP global leadership*. At the same time, by strengthening its IP regimes, China is poised to ‘*fill the void*’ left by weakened U.S. IP protections, particularly for patents, as the U.S. has lost its ‘*comparative advantage in securing stable and effective property rights in new technological innovation*.’ This stark policy asymmetry has multiple significant domestic and international implications for the U.S.” (emphasis added; internal footnotes omitted).¹¹

In addition, NSCAI notes how U.S. patent ineligibility problems are not confined to AI, but encompass other emerging technologies, particularly computer-implemented inventions and biotechnology inventions such as medical diagnostics and biopharmaceutical therapeutics. “First, *U.S. courts have severely restricted what types of computer-implemented and biotech-related inventions can be protected under U.S. patent law*. Critical AI and biotech-related inventions have been denied patent protection since 2010. Facing uncertainty in obtaining and retaining patent protection, inventors pursue trade secret protection. Trade

¹⁰ National Security Commission for Artificial Intelligence, *Final Report* (March 1, 2021), p. 161.

¹¹ *Ibid.*, p. 201.

secrets do not readily promote innovation markets, because trade secrets, unlike patents, do not contribute to accessible technical knowledge in the public domain. While these impacts might not be immediate, *the long-term effects on AI and other emerging technology developments and competitiveness are concerning.*" (emphasis added; internal footnotes omitted).¹²

In short, the state of 101 jurisprudence exposes the United States to a steadily weakened position relative to China and other foreign competitors in critical, emerging technologies' leadership. This has profound implications for U.S. economic strength, national security, our edge in innovation, and competitiveness.

In conclusion, Eagle Forum Education & Legal Defense Fund appreciates the opportunity to provide input on this important subject. We look forward to the resulting report's helping to restore broad patent eligibility and strengthen the American patent system and patent rights.

Sincerely,

/s/ Ed Martin

Ed Martin
President

/s/ Andrew L. Schlafly

Andrew L. Schlafly
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/s/ James Edwards

James Edwards
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¹² Ibid.